

**Classifications**

AWS A5.22-2012 : E309HT1-1

**Description**

- K-309HT is designed for MAG welding of high carbon 22%Cr-12%Ni stainless steels(STS 309) and recommended to be use for high temperature service (about 600°C)
- It is a titania type of flux cored wire for all-position welding and has excellent feedability and increased creep resistance at elevated temperature.
- The weld metal contains optimum ferrite contents in their austenitic micro structures and their weldability is excellent with lower crack susceptibility.

**Welding positions****Polarity & shielding gas**

- CO<sub>2</sub>: 100% CO<sub>2</sub> (15~20ℓ/min)
- DCEP (DC+)

**Typical chemical composition of all-weld metal (%)**

Shielding gas	C	Si	Mn	Cr	Ni	FN
CO <sub>2</sub>	0.06	0.74	1.43	23.45	12.39	14

**Typical mechanical properties of all-weld metal**

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -40°C	Remarks
AWS A5.22 Example	446	min. 550 583	min. 30 38	37	CO <sub>2</sub>

**Notes on usage and welding condition**

- Refer to page 313 for more information on usage
- When heat input is excessive, base metal will be bended or distorted due to the bad heat conductivity. Therefore, perform welding with selecting proper heat input

**Package**

Dia. (mm)	0.9	1.2	1.6
Spool (kg)	5, 12.5, 15		